WASTE MANAGEMENT, TRANSPORTATION, AND DISPOSAL PLAN

CORNELL-DUBILIER ELECTRONICS SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

CLUSTER 12

Revision Final - December 2006
CONTRACT NO. W912DQ-04-D-0023

Prepared By:

Sevenson Environmental Services, Inc.

Prepared for:

U.S. ARMY CORPS OF ENGINEERS
KANSAS CITY DISTRICT OFFICE

WASTE MANAGEMENT, TRANSPORTATION AND DISPOSAL PLAN

CORNELL-DUBILIER SUPERFUND SITE
SOUTH PLAINFIELD, NEW JERSEY

CLUSTER 12

12-22-06

Kim Lickfield **Date**
Sevenson Project Manager

12/22/06

Al LaGreca **Date**
Sevenson Program Manager

12/22/06

Kenneth Paisley **Date**
Sevenson Technical Manager

Date

USACE Project Manager

Prepared By:

Sevenson Environmental Services, Inc.
2749 Lockport Road
Niagara Falls, NY 14305

Revision Final - December, 2006

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

Appendix

LIST OF ACRONYMS

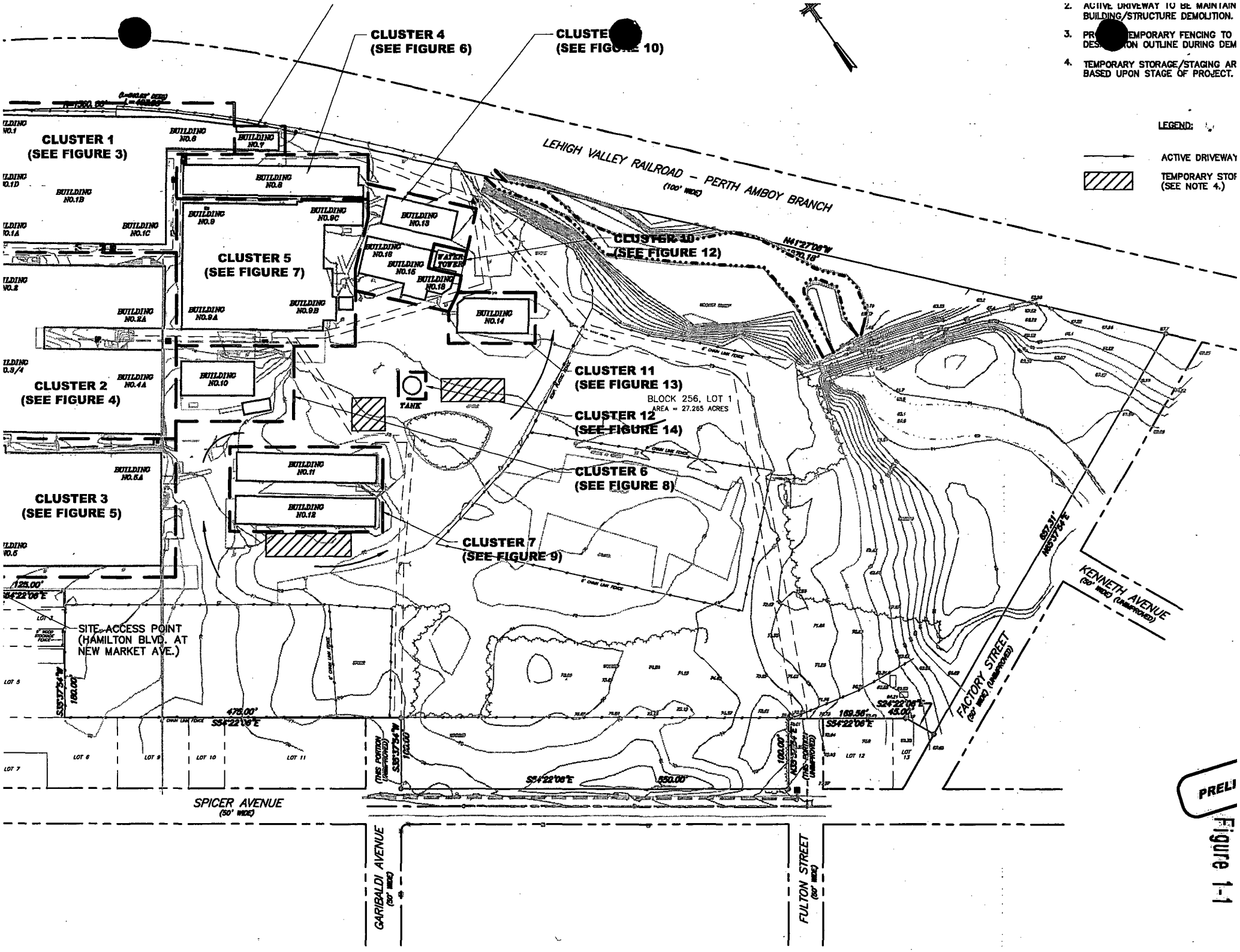
ACM..... Asbestos Containing material
ARAR..... Applicable, Relevant and Appropriate Regulations
CFR..... Code of Federal Regulations
DO..... Delivery Order
IDW..... Investigation Derived Waste
PPM..... Part Per Million
PPE..... Personal Protective Equipment
PCB..... Polychlorinated Biphenyls
PRAC..... Pre-placed Remedial Action Contract
RCRA..... Resource Conservation and Recovery Act
SAP..... Sampling and Analysis Plan
Sevenson..... Sevenson Environmental Services, Inc.
SSHP..... Site Safety and Health Plan
TSCA..... Toxic Substance Control Act
USACE..... Unites States Army Corps of Engineers
USDOT..... United States Department of Transportation
VOC..... Volatile Organic Compound
WMT&DP..... Waste Management, Transportation and Disposal Plan

1 INTRODUCTION

The United States Army Corps of Engineers (USACE) Kansas City District has been designated to remediate the contaminated soils located at the Cornell Dubilier Electronics Superfund Site (the Site), located in South Plainfiled, New Jersey. Sevenson Environmental Services, Inc. (Sevenson), under its Pre-placed Remedial Action Contract (PRAC) No. W912DQ-04-D-0023, has been designated the Remedial Action Contractor for the Site. The primary objective of the remediation effort is the timely and effective cleanup of the Site in accordance with the U.S. Army Corps of Engineers Contract Delivery Order (DO) 0005 issued October 17, 2006, for the Site. This DO provides for the demolition and off-site disposal of materials from within the area designated as Cluster 12.

The remedial activities to be performed at the Cluster 12 (see Figure 1-1) area of the Site will result in the generation of various types of demolition materials and remediation wastes. This Waste Management, Transportation and Disposal Plan (WMT&DP) identifies the procedures and guidelines that will govern material and waste handling operations during the remedial action activities.

Specifically, the WMT&DP describes the classifications of materials and wastes that are anticipated to result from remedial activities; the regulatory requirements for management of such materials and wastes; the procedures to be followed during the remedial action activities for material and waste management, transportation, and disposal; and the applicable notification, documentation, and reporting requirements associated with the material and waste management activities. As additional DO's are issued for the Site, this WMT&D Plan will be updated as necessary.



2. ACTIVE DRIVEWAY TO BE MAINTAIN BUILDING/STRUCTURE DEMOLITION.
3. PR[illegible]EMPORARY FENCING TO DES[illegible]ON OUTLINE DURING DEM
4. TEMPORARY STORAGE/STAGING AR BASED UPON STAGE OF PROJECT.

PRELI

Figure 1-1

2 MATERIAL AND WASTE SOURCES AND CLASSIFICATIONS

This section describes the sources and classifications of the materials and wastes that may be generated during the remedial activities to be performed at the Site.

2.1 SOURCES OF MATERIALS AND WASTES

Implementation of the remedial action activities at the Site will result in the generation of materials and wastes which will require appropriate on-site and off-site management. These materials and wastes will be generated during demolition and removal of Site structures, as well as during the execution of associated support operations (i.e., equipment decontamination, etc.). The anticipated materials and wastes to be generated from the implementation of the remedial action activities include, but are not limited to:

Source	Potential Materials and Wastes
Structure Demolition Activities	• Construction Debris (both contaminated and non-contaminated) • Contaminated Soil directly associated with removal activities • Construction Debris (both contaminated and non-contaminated) • Water from Excavation Areas and Surface Run-off • Spent Personal Protective Equipment (PPE), Debris, Disposable Equipment and Sampling Debris
Decontamination Activities	• Contaminated Sediments and Residues • Decontamination Waters • Spent PPE, Debris, Disposable Equipment
Other	• Common trash and garbage (non-contaminated) • Sanitary Wastewater • Waste Oil (from filters, equipment maintenance) • Asbestos Containing Material (ACM) – Managed by ACM subcontractor

2.2 MATERIAL AND WASTE CLASSIFICATIONS

Previous Site investigations and samplings have been conducted under separate contracts. These investigations have identified areas of concern within Site Areas (designated by Cluster Numbers) and contaminants of concern that may include heavy metals, volatile organic compounds (VOC) and polychlorinated biphenyls (PCB). Identification of the various potential classifications of waste materials for offsite disposal purposes is presented in subsequent sections. A matrix of potential disposal classifications and designated disposal facilities is included in Section 2.2.6.

2.2.1 Non-RCRA Hazardous Debris and Soils

Implementation of the remedial action activities at the Site will involve handling waste materials that are not subject to the Resource Conservation and Recovery Act (RCRA) hazardous waste or Toxic Substance Control Act (TSCA) regulations. A solid waste may be a RCRA hazardous waste if it is specifically listed as a RCRA Hazardous Waste, or if it exhibits any of the following characteristics of hazardous waste: ignitability, corrosivity, reactivity, and/or toxicity. The regulatory definitions for each of these characteristics are contained in 40 Code of Federal Regulations (CFR) Part 261.21 through 261.24. A solid waste may be a TSCA waste if it contains PCB at concentration of greater than 50 parts per million (ppm). The regulatory definitions for each of these characteristics are contained in 40 CFR Part 761. Any wastes identified as being either RCRA Listed or Characteristic Hazardous Wastes, or as TSCA regulated, must be managed in accordance with all applicable RCRA and/or TSCA hazardous waste management regulations.

Additional characterization sampling will be conducted based on previous analytical results and the types and volumes of materials generated for disposal to determine if they exceed regulatory limits for management as a hazardous waste. This sampling is discussed in the Site-specific Sampling and Analysis Plan (SAP), submitted under separate cover.

2.2.2 RCRA Hazardous Debris and Soils

It is not anticipated that any listed wastes are present at the Site. Therefore, for the purposes of this plan, discussion will be limited to RCRA Characteristic Hazardous Wastes.

Characteristic Hazardous Materials and Waste

RCRA characteristic hazardous wastes are materials that exhibit ignitability (Hazardous Waste Code D001), corrosivity (Hazardous Waste Code D002), reactivity (Hazardous Waste Code D003), and/or one or more of the toxicity characteristics (Hazardous Waste Codes D004 through D043). The hazardous waste characteristics are identified through laboratory analysis of waste materials or based on the waste generator's knowledge of the process generating the waste. Review of data from the Site indicates that elevated levels of heavy metals or VOCs may be present in Site wastes. Materials encountered during the remedial action activities will be sampled and analyzed to determine if they are RCRA Characteristic Hazardous Wastes.

Spent PPE, equipment, and materials that are contaminated with RCRA Hazardous Waste may themselves be classified as RCRA Hazardous Wastes based on the "Derived From" Rule. If RCRA Hazardous Wastes are identified at the Site, spent PPE generated during the removal and handling of these materials will be segregated from the other PPE and disposed along with the RCRA hazardous waste itself.

RCRA hazardous wastes will be disposed of at a RCRA hazardous (Subtitle C) permitted dispsal facility.

2.2.3 PCB (TSCA) Hazardous Debris and Soil

Site debris or soils which exhibit levels of PCB contamination at greater than 50 ppm will be managed as a TSCA regulated waste for offsite disposal purposes. Review of data from the Site indicates that elevated levels of PCB may be present in Site wastes. Materials encountered during the remedial action activities will be sampled and analyzed to determine if they are TSCA regulated hazardous wastes. In addition, TSCA wastes with > 500 ppm PCB will be managed as "Principle Threat Material" and will be treated prior to landfill.

TSCA hazardous wastes will be disposed of at a TSCA hazardous (Subtitle C) permitted disposal facility.

2.2.4 RCRA/TSCA Mixed Debris and Soil

Site debris or soils which are sampled and determined to exceed RCRA characteristic hazardous waste criteria and contain PCB at TSCA regulated levels of greater than 50 ppm will be managed as RCRA/TSCA mixed waste.

RCRA/TSCA hazardous wastes will be disposed of at a RCAR/TSCA hazardous (Subtitle C) permitted disposal facility

2.2.5 Other Materials and Wastes

In addition to the waste classification identified above, remedial action activities may also result in the generation of waste materials that are not classified as RCRA or TSCA hazardous wastes but may contain hazardous substances requiring special management procedures (Regulated Wastes). Such Regulated Wastes may include the following:

- Non-Hazardous Wastewaters - Wastewaters generated during project activities may contain contaminants that will be stored in temporary storage tanks onsite. Each tank of water will be sampled to determine possible hazardous waste classification prior to offsite disposal.

- Trash and Rubbish - This material includes spent packaging materials, equipment, and general garbage and trash that has not been impacted by contaminated materials at the Site. Trash and rubbish will be stored on-site in appropriate containers and will be disposed of at a licensed off-site municipal waste facility. This material will be transported by a licensed local municipal waste hauler.

- ACM – ACM material will be removed and managed by the selected asbestos subcontractor, PAL Enviromental Safety Corporation, of Long Island City, NY, under their Asbestos Management Plan, submitted under separate cover.

2.5.6 Waste Classification and Offsite Disposal Matrix

A summary of anticipated disposal facilities, by Contract Bid Item Number and Disposal Classification, is as follows:

Bid Item	Disposal Classification	Disposal Facility Type	Disposal Facility Location
0005	Below-grade construction and debris (C&D)	Non-hazardous landfill	Pioneer Crossing Landfill, Birdsboro, PA
0007A	TSCA > 500 ppm PCB	TSCA direct landfill	Waste Management Model City, NY
0007B	TSCA < 500 ppm PCB	TSCA direct landfill	Waste Management Model City, NY
0007C	RCRA (TCLP Pb)	RCRA stabilization treatment, then landfill disposal	EQ Belleville, MI
0007D	TSCA/RCRA (>500 ppm PCB/TCLP Pb)	Macroencapsulation	Waste Management Model City, NY
0007E	TSCA/RCRA (<500 ppm PCB/TCLP Pb)	TSCA/RCRA stabilization treatment, then landfill	Waste Management Model City, NY

Bid Item	Disposal Classification	Disposal Facility Type	Disposal Facility Location
		disposal	
0008A	TSCA >500 PPM PCB	TSCA treatment and landfill	Clean Harbors, Inc. Grassy Mountain, Ut
0008B	TSCA <500 ppm PCB	TSCA direct landfill	Waste Management Model City, NY
0008C	RCRA (TCLP Pb)	RCRA stabilization treatment, then landfill disposal	EQ Belleville, MI
0008D	TSCA/RCRA (>500 ppm PCB/TCLP Pb)	TSCA/RCRA stabilization treatment, then landfill disposal	Clean Harbors, Inc. Grassy Mountain, UT
0008E	TSCA/RCRA (<500 ppm PCB/TCLP Pb)	TSCA/RCRA stabilization treatment, then landfill disposal	Waste Management Model City, NY

3 REGULATORY REQUIREMENTS

Materials and wastes generated during the remedial action activities at the Site will be managed in accordance with the applicable local, State, and Federal regulations for each particular classification. In addition, all waste management activities will be performed in a manner that is protective of human health, safety, and the environment. The following sections describe the regulatory requirements for the wastes identified in Section 2 of this WMT&DP.

The anticipated transporters are:

RCRA/TSCA Hazardous Transporters

Transporter: US Bulk Transport, Inc.
US EPA ID Number: PAD 987347515
Facility Location: Fairview, Pa
Name of Responsible Contact: Craig Goodelle
Telephone Number: (800) 642-8910
Unit of Measure for Costing Purposes: Per Ton

Transporter: Page ETC, Inc.
US EPA ID Number: NYD 986969947
Facility Location: Beachwood, NJ
Name of Responsible Contact: Mark Gleason
Telephone Number: (732) 240-7990
Unit of Measure for Costing Purposes: Per Ton

Non-RCRA/TSCA Hazardous Transporters

Transporter: J&D Trucking, Inc.
US EPA ID Number: NJD 000029967
Facility Location: Vineland, NJ
Name of Responsible Contact: Joe Manis
Telephone Number: (856) 691-5145
Unit of Measure for Costing Purposes: Per Load

Transporter: Environmental Transport Group, Inc.
US EPA ID Number: NJ0 000692061
Facility Location: Flanders, NJ
Name of Responsible Contact: Rob Collioud
Telephone Number: (800) 598-3844
Unit of Measure for Costing Purposes: Per Load

The anticipated offsite disposal facilities are:

Non-RCRA/TSCA Hazardous Disposal Facility

Facility Name: Pioneer Crossing Landfill
Pennsylvania ID Number: Permit No. 100346
Facility Location: Birdsboro, PA
Name of Responsible Contact: Tom O'Connor
Telephone Number: (610)-582-1900
Unit of Measure for Costing Purposes: Per ton

RCRA/TSCA Hazardous Disposal Facilities

Facility Name: Waste Management, Inc./Model City Landfill
US EPA ID Number: NYD 002114759
Facility Location: Model City, NY
Name of Responsible Contact: Pat Ludwig
Telephone Number: (716) 754-8231
Unit of Measure for Costing Purposes: Per ton

Facility Name: The Environmental Quality Company
US EPA ID Number: MID 000724831
Facility Location: Belleville, Mi
Name of Responsible Contact: Mara Klien
Telephone Number: (800) 592-5489
Unit of Measure for Costing Purposes: Per ton

Facility Name: Clean Harbors, Inc
US EPA ID Number:
Facility Location: Grassy Mountain, Ut
Name of Responsible Contact: Chris Vidovich
Telephone Number: (724) 223-7704
Unit of Measure for Costing Purposes: Per ton

3.1 NON-RCRA DEBRIS AND SOILS

On-Site Management Requirements

Management of non-RCRA or TSCA hazardous demolition debris and soils involves removal of designated structures and associated soils from the Cluster Areas of the Site. Structures and soils have been previously tested, and additional samples for waste characterization purposes will be obtained per the Site-specific Sampling and Analysis Plan (SAP), submitted under separate cover. Wastes will either be transported to the on-site stockpile area or loaded directly into trucks for shipment off-site to the chosen disposal facility.

If needed, stockpiles will be covered with six mil polyethylene in a way to suppress dusting or blowing and to allow water runoff without contaminating the runoff water. Stockpiles will be kept to a minimum, typically under one hundred cubic yards and be constructed as specified in Contract Specification Section 13285 of the Specifications. Soil erosion control measures including silt fence, sand bags, etc. will be installed around stockpiles to prevent the migration of solids' material.

All material management activities will be performed in accordance with applicable local, State and Federal regulations for handling, labeling, and storage of non-RCRA hazardous materials.

Off-Site Transportation Requirements

Non-hazardous debris and waste material must be disposed of at a facility licensed/permitted to accept non-RCRA hazardous materials. For the Site, it is anticipated that contaminated soils will be transported to a licensed/permitted Subtitle D disposal facility approved by the USACE listed in Section 2.5.6.

Off-Site Processing & Disposal Requirements

No offsite processing of Site debris and waste materials is anticipated. Each load of waste shipped will be accepted under the waste approval acceptance application (Non-hazardous Waste Certification Form)

submitted to the disposal facility. All loads of waste will be managed by the landfill per their permit requirements by direct dumping and landfill.

3.2 RCRA HAZARDOUS DEBRIS AND SOILS

On-Site Management Requirements

Management of RCRA hazardous demolition debris and soils involves removal of designated structures and associated soils from the Cluster Areas of the Site. Structures and soils have been previously tested, and additional samples for waste characterization purposes will be obtained per the Site-specific Sampling and Analysis Plan (SAP), submitted under separate cover. Wastes will either be transported to the on-site stockpile area or loaded directly into trucks for shipment off-site to the chosen disposal facility.

Stockpiles will be covered with six mil polyethylene in a way to suppress dusting or blowing and to allow water runoff without contaminating the runoff water. Stockpiles will be kept to a minimum, typically under one hundred cubic yards and be constructed as specified in Contract Specification Section 13285 of the Specifications. Soil erosion control measures including silt fence, sand bags, etc. will be installed around stockpiles to prevent the migration of contaminants.

All material management activities will be performed in accordance with applicable local, State and Federal regulations for handling, labeling, and storage of RCRA hazardous materials.

Off-Site Transportation Requirements

RCRA hazardous debris and waste material must be disposed of at a facility licensed/permitted to accept RCRA hazardous materials. For the Site, it is anticipated that contaminated soils will be transported to a licensed/permitted Subtitle C disposal facility approved by the USACE listed in Section 2.5.6.

Off-Site Processing & Disposal Requirements

RCRA hazardous debris and soils (assumed hazardous for TCLP lead) will be treated under Land Disposal Restriction regulations per 40 CFR 268.40 by the landfill by stabilization prior to final disposal. Each load of waste shipped will be accepted under the waste approval acceptance application (Waste Profile Form) submitted to the disposal facility.

3.3 TSCA HAZARDOUS DEBRIS AND SOILS

On-Site Management Requirements

Management of TSCA hazardous demolition debris and soils involves removal of designated structures and associated soils from the Cluster Areas of the Site. Structures and soils have been previously tested, and additional samples for waste characterization purposes will be obtained per the Site-specific Sampling and Analysis Plan (SAP), submitted under separate cover. Wastes will either be transported to the on-site stockpile area or loaded directly into trucks for shipment off-site to the chosen disposal facility.

Stockpiles will be covered with six mil polyethylene in a way to suppress dusting or blowing and to allow water runoff without contaminating the runoff water. Stockpiles will be kept to a minimum, typically under one hundred cubic yards and be constructed as specified in Contract Specification Section 13285 of the Specifications. Soil erosion control measures including silt fence, sand bags, etc. will be installed around stockpiles to prevent the migration of contaminated material.

All material management activities will be performed in accordance with applicable local, State and Federal regulations for handling, labeling, and storage of TSCA hazardous materials.

Off-Site Transportation Requirements

TSCA hazardous debris and waste material must be disposed of at a facility licensed/permitted to accept TSCA hazardous materials. For the Site, it is anticipated that contaminated soils will be transported to a licensed/permitted Subtitle C disposal facility approved by the USACE listed in Section 2.5.6. All loads will be manifested with net payload weights in kilograms per 40 CFR 761.207.

Off-Site Processing & Disposal Requirements

TSCA hazardous debris and soils (PCB > 50 ppm) will be directly landfilled by the disposal facility. Each load of waste shipped will be accepted under the waste approval acceptance application (Waste Profile Form) submitted to the disposal facility.

3.4 RCRA/TSCA HAZARDOUS DEBRIS AND SOILS

On-Site Management Requirements

Management of RCRA/TSCA hazardous (assuming hazardous for TCLP lead with greater than 50 ppm PCB) demolition debris and soils involves removal of designated structures and associated soils from the Cluster Areas of the Site. Structures and soils have been previously tested, and additional samples for waste characterization purposes will be obtained per the Site-specific Sampling and Analysis Plan (SAP), submitted under separate cover. Wastes will either be transported to the on-site stockpile area or loaded directly into trucks for shipment off-site to the chosen disposal facility.

Stockpiles will be covered with six mil polyethylene in a way to suppress dusting or blowing and to allow water runoff without contaminating the runoff water. Stockpiles will be kept to a minimum, typically under one hundred cubic yards and be constructed as specified in Contract Specification Section 13285 of the Specifications. Soil erosion control measures including silt fence, sand bags, etc. will be installed around stockpiles to prevent the migration of contaminated material.

All material management activities will be performed in accordance with applicable local, State and Federal regulations for handling, labeling, and storage of RCRA and TSCA hazardous materials. In addition, TSCA soils > 500 ppm will be managed as "Principle Threat Material" and will be treated prior to landfill.

Off-Site Transportation Requirements

RCRA/TSCA hazardous debris and waste material must be disposed of at a facility licensed/permitted to accept both RCRA and TSCA hazardous materials. For the Site, it is anticipated that contaminated soils will be transported to a licensed/permitted Subtitle C disposal facility approved by the USACE listed in Section 2.5.6. All loads will be manifested with net payload weights in kilograms per 40 CFR 761.207.

Off-Site Processing & Disposal Requirements

RCRA hazardous (TCLP Lead) hazardous and TSCA regulated debris and soils (with 50 ppm<PCB < 500 ppm) will be stabilized for the lead component and landfilled by the disposal facility. RCRA hazardous (TCLP Lead) hazardous and TSCA regulated debris (with > 500 ppm PCB) will be macroencapsulated and landfilled by the disposal facility. RCRA hazardous (TCLP Lead) hazardous and

TSCA regulated soils (with > 500 ppm PCB) will be stabilized for lead content and landfilled by the disposal facility. Each load of waste shipped will be accepted under the waste approval acceptance application (Waste Profile Form) submitted to the disposal facility.

3.5 OTHER MATERIALS AND WASTES

Wastes other than soils that are contaminated, but non-RCRA hazardous, and non-regulated will be handled and stored on-site in a manner that prevents releases to the surrounding environment and that will not interfere with on-site activities.

Disposal Options

The disposal options available for the various non-regulated wastes that may be encountered during performance of the work are presented below:

- Trash and Rubbish - Trash and rubbish will be hauled by a local, licensed hauler to an appropriate municipal or industrial waste facility.
- Waters – All waters generated during remedial activities will be temporarily stored onsite prior to characterization for offsite transport and disposal.
- Used oils – Used oils will be stored onsite prior to transport offsite for recycling.
- ACM – ACM material will be removed, bagged or containerized, and managed by the ACM subcontractor per their Asbestos Management Plan, submitted under separate cover.

4 MATERIAL AND WASTE MANAGEMENT PROCEDURES

This section presents the specific guidelines and procedures that will be followed for the management of material and wastes handled during the remedial action activities at the Site. These procedures are generally applicable to the management of wastes after they have been removed/excavated. Specific procedures for material and waste excavation and removal are presented in the Excavation and Materials Handling Plan, submitted under separate cover. The procedures presented in this section are based on the project goals of minimizing threats to Site workers, human health, and the environment during all material and waste handling activities. Specific procedures and guidelines for handling, staging, storing, sampling, packaging, labeling, and transporting material and waste are presented in the following sections.

4.1 GENERAL

Material and waste handling activities will be performed in a manner that minimizes the threat of a release of potentially contaminated material to the environment and surrounding community, and protects worker health and safety. Care will be taken during operations and activities that will generate materials and wastes, such as demolition and excavation, to prevent releases of material, waste, and dust to the surrounding environment. All waste management disposal options are included in Section 2 of this WMT&D Plan.

4.2 MATERIAL AND WASTE HANDLING PRECAUTIONARY MEASURES

The following procedures may be implemented prior to or during remedial activities to ensure that there are no releases of material and/or waste to the environment and surrounding community, and to protect Site workers.

- Engineering controls such as water sprays may be used during activities that could potentially generate dust (i.e., demolition and loading) to prevent the spread of contaminants via wind dispersion.
- Plastic sheeting may be placed under and around containers while they are being loaded. Any material that falls onto the plastic sheeting during loading will be collected and placed in the container.
- Site workers will wear PPE appropriate for the specific task being performed, in accordance with the Site Health and Safety Plan, submitted under separate cover. Spent PPE and contaminated disposable equipment and materials will be containerized and disposed of appropriately.
- Equipment used during construction activities in potentially contaminated areas will be properly decontaminated before moving through clean areas of the Site or leaving the Site.
- A "clean road" will be established to allow material and waste hauling vehicles to enter and exit the Site without coming into contact with contaminated media. This will prevent contaminated debris, soils or sediments from being "tracked" onto the public roadways. Vehicles will undergo decontamination (brooming, brushing or washing), as necessary, based on a visual screening process.

4.3 PRE-EXCAVATION SCREENING

Pre-demolition and excavation screening of materials will be conducted per the SAP. Demolition in each Cluster is based upon the Site Drawings and footprints of contamination provided by USACE. Excavation limits for soils in proximity to foundations and subsurface structures will be based on the removal of the minimal amount of associated soils necessary to complete sampling, building demolition and subsurface structure removal.

4.4 MATERIAL AND WASTE HANDLING, STAGING, AND STORAGE

The procedures and guidelines that will be used for handling, staging, and storage of waste materials generated during the remedial activities at the Site are presented below.

As demolition waste is generated or contaminated soils are excavated, they will be loaded into hauling vehicles for direct transport to the offsite landfill or transferred to the appropriate designated staging area or material preparation area (materials containing free liquid only) for further management. The Site Excavation and Materials Handling Plan identifies the locations of the designated staging areas within the exclusion zone.

Materials transported for offsite disposal must not contain any free liquids and must pass the paint filter test. Therefore, any materials that are saturated upon removal or excavation may be transferred to a designated temporary material preparation area prior to transfer to the loading area. The material preparation area will be equipped with a sump to allow for collection of waters. These waters will be transferred to the on-site holding tank for disposal and/or reuse. Sumps at the material preparation area and staging areas will be cleaned out, as necessary, to remove accumulated sediments. Cleaning of the sediment traps will be performed using hand tools and heavy equipment, as appropriate. Sediments removed from the sump will be solidified, as necessary, and disposed of along with soils.

All trucks, excluding those dedicated to the demolition or excavation areas of the site, will remain on the "contaminant-free" haul road within the Exclusion Zone. All vehicles leaving the Exclusion Zone will be visually inspected, and, if leaving the Site property, decontaminated prior to release per the SSHP.

All below-grade grubbed material (i.e. tree roots or piping) removed during excavation will be managed with the soils. The excavator will shake tree root masses or piping as they are removed to dislodge clumps of soil. To the greatest extent possible, all subsurface debris will be directly loaded into disposal transport vehicles with associated debris or soils. If necessary, large/oversize debris will be pulled to the side of the excavation prior to loading. As required, physical sizing of debris will be performed by Sevenson personnel before loading. Oversize concrete may also be removed to the stockpile area for further size reduction or removal of rebar or mesh. Debris will be sized to approximately 24 to 36 inch diameter size to meet landfill requirements.

In addition to Site soils and debris, all Investigation Derived Waste (IDW) and PPE, including discarded disposable Health and Safety sampling equipment and plastic sheeting, will be consolidated on a daily basis at the decontamination pad area at the Site. IDW/PPE will be placed in plastic bags on a daily basis prior to weekly consolidation into (55) gallon drums for storage. Once offsite transportation of waste commences, the (55) gallon drums will be emptied into loads of waste being shipped for disposal.

Besides IDW and PPE generated during project activities, other components (i.e. tools, brooms, etc.), debris or refuse might be generated by contact with contaminated soils. These secondary wastes will be disposed of along with Site soils. Planning, management and housekeeping practices will be employed that minimizes generation of secondary wastes. These management and housekeeping practices will include:

- Determine which tools or materials must be taken into designated contaminated areas and limit as practical.
- Identify and maintain designated tools or materials for use in contaminated areas.
- Prevent excessive amounts of materials (i.e. bags, rags, etc.) from entering designated areas.
- Segregate and maintain contaminated materials from non-contaminated sources.

- Reuse contaminated materials within designated areas, as possible.
- Separate compactable from non-compactable contaminated materials.

4.5 MATERIAL AND WASTE SAMPLING AND ANALYSIS

Sample analysis results for Full RCRA characterization and total PCB content analysis from the samples obtained by Sevenson during area characterization activities will be submitted to the disposal facility along with a completed waste profile to obtain disposal approval. The detailed procedures for sampling excavated materials are presented in the SAP, submitted under separate cover.

Laboratory operations project organization and personnel responsibilities are provided in the laboratory's Quality Assurance Project Plan which can be made available for review by request.

4.6 MATERIAL AND WASTE PACKAGING

All material and waste scheduled for off-site transportation and disposal will be properly packaged in accordance with all applicable local, State and Federal regulations, including USDOT Hazardous Materials Regulations contained in 49 CFR Parts 171 through 180. Materials scheduled for shipment will be packaged in either end dump or tri-axle dump trailers.

The following minimum packaging requirements apply for materials to be shipped:

Bulk Packaging

- Bulk packaging (i.e. dump or tri-axle trailers) must, at a minimum, meet the applicable requirements contained in 49 CFR 173.24, General Requirements for Packaging and Packages.
- Bulk packaging must be covered. The top must be completely enclosed with no opening along the sides or openings in the top.
- Bulk packaging must be prepared to prevent material from leaking out or water from leaking in. Shipments containing free water will not be accepted by the disposal facility.
- Bulk packaging must be clean. It must not have any waste materials, or other material which could be mistaken for waste material, on the outer surface.
- Each bulk container which requires marking will be properly marked in accordance with 49 CFR 172 Subpart D.

4.7 MATERIAL AND WASTE LABELING AND DATING

Material and waste containers and packages will be marked in accordance with applicable local, State and Federal requirements (49 CFR 172 Subpart D). In addition, a unique identification number will be assigned to each load of waste for disposal to allow for proper tracking of the material from the time of shipment through off-site disposal and receipt of a certificate of disposal (if applicable). This information will be recorded by on-site personnel on a Material and Waste Disposal Tracking Log (See Appendix A).

5 NOTIFICATIONS, DOCUMENTATION, AND REPORTING

The following sections present the procedures to be used for notifications, documentation, and reporting activities associated with management of excavated material during the remedial activities.

5.1 NOTIFICATIONS

Notifications of material and waste management activities at the Site will be made in accordance with the requirements of applicable local, State, and Federal requirements. In particular, notification of Off-Site Policy Certification per 40 CFR 300.440 will be made.

In the unlikely event that an incident occurs during transport, the Waste Transportation and Disposal Coordinator will notify the appropriate USACE representative as well as the required entities, as defined by USDOT requirements. The type of information that may be provided includes:

- Location and name of person making report.
- Name and address of carrier represented by person making the report.
- Telephone number where person can be reached.
- Date, time, and location of the hazardous materials incident.
- Extent of injuries, if any.
- Classification of materials involved.
- Type of incident and nature of hazardous materials, if any, involved.
- Whether or not a continuing danger to life exists.

5.2 DOCUMENTATION PROCEDURES

Various types of documentation will be required for material management activities associated with the remedial activities to be performed at the Site. Field activities that generate material and waste will be documented to ensure that material and waste are managed appropriately. Material and waste characterization activities will be documented to ensure that material and waste characterization data can be easily and clearly correlated to a particular Site area. Material and waste management activities will be closely documented to ensure that all materials and wastes are properly handled and disposed of.

5.2.1 Documentation of Field Activities

Field activities, if any, that generate material and waste will be properly documented in order to establish the origins of such material and waste for proper disposal. The party who containerizes the material or waste is responsible for the initial documentation associated with generation of material or waste. At a minimum, the following information will be recorded when material or waste is generated and containerized:

- The date of generation.
- A description of the material or waste.
- Any pertinent observations about the material or waste.
- The approximate quantity of material or waste.
- The type of storage container used for the material or waste.
- Where the material or waste shall be staged while awaiting characterization and disposal.

The containers and/or stockpiles used for on-site storage of material or waste will be appropriately dated and labeled to assist in proper tracking of material or waste. All stockpiling will be conducted in such a manner as to limit the possibility of the commingling of different waste types or hazardous waste classifications.

5.2.2 Documentation During Transportation and Disposal

Transportation and disposal activities will be documented using the Material and Waste Disposal Tracking Log presented as Appendix A to this plan. The information recorded on this log, when applicable, may include:

- The load identification number for the material/waste.
- The material/waste disposal approval number.
- The quantity of the material/waste.
- The facility to which the material/waste was sent.
- The manifest number (if required) for shipment off-site.
- The date the material/waste was shipped.
- The date on which it was received at the facility.
- The date a certificate of acceptance or disposal was received from the facility (if applicable).

5.3 On-Site Spill Response Plan

All transportation subcontractors will have spill response contingency plans for handling spills ranging from small incidental releases to large releases caused by overturns (See Section 9.3). Sevenson personnel will handle small releases onsite. Large releases caused by full overturns on-site incidents will be handled by teams of the transporter's in-house response crews supplemented by Sevenson or additional subcontractors as required. Manpower, equipment and materials are handled on a case-by-case basis.

6.1 DOT-Required Placards

All transport vehicles operating within the Site perimeter that do not travel public access roadway will not require D.O.T. placarding.

All DOT and/or RCRA regulated materials shipped from the Site to the appropriate disposal facility will be transported in properly placarded, permitted vehicles. The following is a list, by waste type, of D.O.T. shipping name, hazard class, and placard requirements:

Waste Type	D.O.T. Shipping Name	Hazard	Hazard Class	Number
RCRA Hazardous (D008)	RQ, Hazardous Waste Solid, n.o.s. (D008)	9	NA 3077	
TSCA Hazardous (PCB > 50 ppm)	RQ, Polychlorinated Biphenyls, Solid	9	UN 2315	
RCRA/TSCA (D008) (PCB) Hazardous	RQ, Hazardous Waste Solid, n.o.s.	9	NA 3077	
Non-hazardous Debris and Soil	Non D.O.T. Regulated Material (Site Debris)	None	None	

A total of four placards will be placed on each vehicle, with one placard affixed in a place that is clearly visible on each side and on each end of the dump box of the vehicle. The position, durability, color, size and type of the placard will comply with all requirements set forth by 49 CFR Section 172.504, 172.508, 172.516, 172.519, 172.331, and 172.332.

Office Waste and Sanitary Facility Waste from the Site are not considered D.O.T. or RCRA hazardous. They will be transported by truck for disposal by the appropriate municipal or private entity or subcontractor for offsite management. No D.O.T. placarding of this material shall be required.

6.2 Example of Placards

The above referenced placard will be vinyl and measure 10.75" x 10.75" and be imprinted with the numbers 3077 or 2315. An example of a placard is included in Appendix F of this plan. If during the completion of the Cluster, or future Cluster Areas, additional designation placards are required, this plan will be amended to included examples of each.

7 MODE AND ROUTE OF TRANSPORTATION

This section describes the procedures for transportation and disposal of material and waste during remedial activities.

Sevenson personnel and the designated onsite Transportation Coordinator will manage all aspects of transportation for disposal for all waste at the Site. This will include the scheduling, staging, directing from various Site locations, issuance of required paperwork, and final inspection prior to exit from the Site. Further detail and explanation of transport activities is found in the Traffic Control and Transportation Plan, submitted under separate cover.

A log of all truckloads will be maintained on site. This log, as a minimum, will contain the date shipped, truck number/license plate number, weight, manifest number, truck tare weight, and any other pertinent information pertaining to a particular shipment.

The transportation subcontractor will be responsible for en-route tracking and management of waste shipments. A daily summary of truck delivery logs will be provided to Sevenson by the transportation subcontractor. Sevenson will coordinate with the transportation subcontractors to assure adequate numbers of trucks are scheduled daily to meet contract completion schedules.

The designated Transportation Coordinator for this project is Kenneth Paisley, of Sevenson. Mr. Paisley's resume is included in Appendix C of this Plan.

7.1 Type of Transporter

Hazardous bulk solid wastes will be loaded directly into polypropylene-lined aluminum-bodied end dump trailers for transport to the appropriate disposal facility as referenced in Section 2.0 of this Plan. Non-hazardous loads will not require a lined transport vehicle.

Municipal (Office) wastes will be consolidated into a commercial dumpster that will be staged at the Site. The contracted municipal waste hauler will empty the container into a bulk transfer trailer.

Sanitary waste will be removed from Site Port-A-Johns by the contracted septic waste service. Each Port-A-John unit will be emptied with a vacuum tanker.

7.2. Transport Vehicle Capacity

The bulk solid dump trailers will measure approximately 40' long (outside dimensions), 8' wide (outside dimensions) and 7' high. Each dump trailer will hold approximately 40 cubic yards or between 22-25 tons of material.

Municipal and sanitary contractors will supply adequate equipment to perform removal of their designated wastes.

7.3. Anticipated Shipment Frequency

Empty dump trailers for bulk solids will be loaded t from outside the temporary storage pad or demolition exclusion zone areas. All full trailers will be immediately tarped to prevent the infiltration of precipitation and any possible drying/dusting problems. All loading and removal will be performed between the hours of 7:00 am and 5:00 pm, subject to change by request of USACE and approval by the

USEPA. Sevenson will coordinate with the transportations subcontractors to provide sufficient vehicles to maintain the project schedule.

The project schedule and the proposed demolition plan may require the shipment of waste to multiple disposal facilities on any given workday. Sevenson will coordinate closely with each facility's designated representative and/or on-site transportation coordinator. A color-coded demolition and excavation site diagram will be prepared based upon the previous determinations of waste types from the contract drawings and results of additional site sampling, as required. A review of the past days' removal, and the current days anticipated production will be conducted with field supervisors and operators at the morning tailgate meeting. A daily verification of completed and proposed scheduling of excavation will be made with the onsite transportation coordinator, each disposal facility, and the anticipated transporters of waste. Records pertaining to all daily demolition and/or excavation activities and contacts with various subcontractors will be maintained in the Daily Quality Control Reports for the Site.

Office waste will be collected in appropriate containers (dumpsters) onsite and picked up on a weekly basis by a municipal waste contractor.

Sanitary wastes will be collected on a minimum weekly basis, or more frequently as required, by the septic disposal contractor in septic waste vacuum tanker.

7.4 Transportation Route

The disposal transport vehicles will be called to the site on an as required basis. The trucks will approach the Site via I-287, taking either the Dunham Avenue exit (eastbound) or the Stelton Road exit (westbound). After exiting, the trucks will turn onto Hamilton Boulevard and enter the Site at 333 Hamilton Boulevard. The trucks will then be directed by Sevenson personnel to the loading location.

Once loaded, the vehicles will proceed to the Site scale for weighing. Once weighed, the truck will proceed to the tarping station for final preparation. After tarping, the exterior of the truck/trailer will be decontaminated, as necessary, on the decontamination pad. After receiving final notification from the onsite Transportation Coordinator, the trucks will then exit the gate and proceed on a reverse route to I-287. The trucks will then proceed to the appropriate disposal facility by the specified routes included in Appendix E.

All municipal solid waste and sanitary waste transport vehicles will also utilize these routes to enter and leave the Site.

7.5 Temporary Off-Site Storage

All transport vehicles will travel directly to their intended disposal facility. No offsite temporary storage of Site materials is anticipated. Should mechanical failure or driver injury necessitate the unscheduled storage of materials once the vehicle is en route, the appropriate parties will immediately notify Sevenson. Sevenson will make the USACE aware of any transport irregularities and will coordinate with USACE to resolve any difficulties.

If possible, the vehicle should be returned to the Site or removed to the transporter's own secure facility or service yard until alternate arrangements can be made. If this is not possible, another facility's secured yard or lot will be desirable.

7.6 Weight and Size Limitations

The bulk solid dump trailers and their associated transport vehicle furnished by the transporters will have a legal over-the-road weight capacity of 80,000 pounds gross weight. Each tractor and trailer combination will vary slightly in payload capacity, so the driver of the vehicle will be consulted prior to exiting the Site to confirm payload appropriateness.

All other types of transport vehicles will be subject to limitations according to their manufacturer's requirements. All hauling weights will be confirmed with the driver and their respective dispatcher prior to the first removal of a particular waste from the Site.

7.7 Vehicle Licensing and Registration Requirements

All vehicles will be licensed and permitted in all states through which they may travel. The onsite Transportation Coordinator will confirm all permitting issues with the dispatcher of the trucking company. Copies of all permits and licenses will be made available onsite upon request by USACE.

8 SAMPLE SHIPPING PAPERS

8.1 Summary and Examples of Completed Shipping Papers

The required shipping papers for each shipment of RCRA, TSCA or RCRA/TSCA regulated hazardous waste from the Site will consist of an Hazardous Waste Manifest, Land ban Disposal Restriction (LDR) Form, and, if required by the transportation company, a truckers' bill of lading.

One set of forms will be provided for each load. When ready to exit the Site, the truck driver will be presented the completed paperwork. He will sign the manifest, as directed, and carry the manifest, LDR, and bill of lading (as required), in his cab at all times until he arrives at the disposal facility.

All other Non-hazardous solid wastes will be shipped with the shipping documentation (bill of lading, receipt ticket, etc.) supplied by the appropriate subcontractor.

Copies of example shipping documents can be found in Appendix C of this Plan.

9.0 TRANSPORTATION QA PROGRAM

9.1 Truck Inspection Criteria and Corrective Action Procedures

9.1.1 Truck Integrity

All truck/transportation vehicle tires should be inspected immediately upon arrival at Site by the designated Transportation Coordinator and/or Sevenson's Project Manager for punctures, cracks, or protrusions. It is the responsibility of the appropriate transportation subcontractor to deliver well-maintained, usable transport vehicles to the Site and the responsibility of Sevenson to determine if the vehicle is fit to carry the specific waste. If the vehicle is not acceptable to Sevenson, the subcontractor shall be notified immediately that the vehicle has been rejected and arrangements shall be made for replacement.

9.2 Lining and Tarping Procedures

All bulk solid hazardous waste transport vehicles will be lined with a 6 mil polyethylene liner. The liners will have sufficient end flaps and side flaps which extend over the edges of the box to protect from contamination. Once loaded, the flaps will be folded into the center of the waste to partially cover the load.

The tarps (top covers) are made of 9 mil woven polypropylene fabric and measure approximately 10' wide x 24' long. The tarps will be secured using braided rope through 16 tie-down hooks.

Although not anticipate, liners for non-hazardous trucks may be used at the discretion of the disposal facility and Sevenson. All non-hazardous loads will be securely tarped, however, before leaving the Site.

9.3 Spill Response Contingency Plan

All transportation subcontractors will have spill response contingency plans for handling spills ranging from small incidental releases to large releases caused by overturns. Large releases caused by full overturns or offsite incidents will be handled by teams of the transporter's in-house response crews supplemented by subcontractors as required. Manpower, equipment and materials are handled on a case-by-case basis. Any subcontractor will notify Sevenson in the event that any spillage occurs during transit to its appropriate designation facility. Each truck transporter is required to maintain and follow a Spill Contingency Plan. Notification by the truckers of any incidents shall be made to Sevenson. In turn, Sevenson will notify all appropriate individuals associated with this project of any spill and the response actions being taken. Copies of the transporter's Spill Contingency Plan are included in Appendix D.

APPENDIX A
MATERIAL AND WASTE DISPOSAL TRACKING LOG

Waste Tracking Log

Job #:

Project Name:

Revised Date:

PM:

Load No.	Ship To	Transporter	Date Shipped	Time Slot	Profile	Transport P.O.#	Demurrage (if any) hrs	Manifest Number	Man. Doc. #	Est. Net Weight	Actual Weight KG	Actual Tons	COD Rec'd

APPENDIX B
FACILTY ACCEPTANCE LETTER

PENDING

APPENDIX C
TRANSPORTATION COORDINATOR RESUME

Kenneth O. Paisley

Manifest Review/Approval	✓
Project Cost Management	✓
Waste Classification	✓
On-site/Off-site Treatment	✓
Truck/Rail Transport	✓
TSD Compliance Evaluations	✓
Permit Identification	✓
QAPP/SAP Preparation	✓

Job Title: Technical Manager

Education: B.S., Biology, Bloomsburg University, 1988

Years Experience: 17 years

Special Qualifications:
Certified Hazardous Materials Manager (CHMM), Master Level (Certificate #7961)
USACE Wetland Delineation and Management Training (Certificate #2279)
40-hour and 8-hour OSHA Hazardous Waste Site Training per 29 CFR 1910.120
Radiation Worker I and II Certification
Cargo Security Awareness/Planning Training per 49 CFR 172.704(a)
HM-181/POPS Training / DOT Training Certification per 49 CFR 172 Subpart H
US Army Corps of Engineers Construction Quality Management Certification
Member, Air and Waste Management Association Member
Academy of Certified Hazardous Materials Managers, President Western New York Chapter

Summary of Specific Experience and Qualifications

- ✓ ***Sixteen years working experience in regulations associated with Hazardous, Toxic, and Radioactive Waste (HTRW) investigations, compliance, studies, designs and remediations.***
- ✓ ***Multi-task oriented and capable to allow management and input to numerous company project sites simultaneously.***
- ✓ ***Familiar with regulations and the permitting and operation of waste facilities and landfills.***
- ✓ ***Knowledgeable in the requirements for D.O.T certification as described in 40 CFR 383, 390-397, and 399 and 49 CFR 172, 177, and 263 for the transport of hazardous materials.***
- ✓ ***Personnel conducted environmental audits of 23 HTRW TSD facilities (incineration, chemical treatment, recycling and landfill).***

Complete Experience Record:

Sevenson Environmental Services, Inc. (1991 to Present)
Mr. Paisley brings to Sevenson Environmental Services, Inc., a background in many component areas of hazardous waste site remediation. He has worked in the nuclear/chemical waste industry. He has served as a TSD facility waste approval coordinator and has been a technical representative for regulatory issues, as well as a manager of remediation projects. This diverse background enables Mr. Paisley to interface effectively with hazardous waste generators, project management, regulatory agencies, and subcontractors. As Technical Affairs Manager, Mr. Paisley is responsible for regulatory compliance matters on all Sevenson projects. He provides support services to project management on technical issues pertinent to proper waste handling techniques. He also develops and manages waste characterization plans consisting of sampling protocol, analytical requirements, and final waste disposition. In addition, he sources and evaluates all analytical, transportation, and disposal subcontractors. Mr. Paisley's project experience is as follows:

Select Project Experience:

- **Cumberland Bay Site (NYS Superfund), Plattsburgh, NY** - Technical Affairs Manager for the dredging, dewatering, treatment, and disposal of approximately 90,000 cubic yards of PCB sludges from a 34 acre area of Lake Champlain. In addition, 20,000 cubic yards of shoreline were excavated for disposal. Duties included the placement, staffing and coordination of an on-site laboratory to perform immunoassay testing to determine PCB concentrations in waste prior to off-site disposal. Planned and coordinated all other site analytical testing including the placement of real-time monitors to determine Total Suspended Solids (TSS) content outside of sheet-piled areas and at water discharges. Arranged for and coordinated the shipment of all site waste to either non-hazardous or TSCA landfills, as applicable.

- **Austin Avenue Radiation Superfund Site, Lansdowne, Pa -** Technical Affairs Manager for the radiological remediation of 21 properties contaminated with radium-226 and thorium-230 tailings. Sevenson selectively removed and segregated radiologically contaminated portions of the properties. These were then staged, packaged and transported for offsite disposal via truck and rail.

- **W.R. Grace & Company, Inc., Chattanooga, TN** - Technical Affairs Manager for the hydraulic dredging and dewatering of 60,000 cubic yards of sediments from rare earth ponds and excavation and solidification of 40,000 cubic yards sediments from thorium ponds. Dewatering performed with three 200 cubic foot plate and frame filter presses. Treated radiologically contaminated sediments disposed of in an approved disposal facility. Arranged for and coordinated the rail transportation and offsite disposal of all treated soils.

- **Purolator Products, Inc. Elmira, NY** - Technical Affairs Manager for the excavation and disposal of 12,000 tons of RCRA hazardous soils and solids and 21,000 tons of non-RCRA hazardous soils from a currently operating automotive supply manufacturer. Prepared and supervised implementation of an in situ sampling program to determine waste classification. Coordinated transportation and disposal via landfilling, chemical oxidation, and incineration. Supervised the operation and permit compliance of a 50,000 gallon batch water treatment plant.

- **Rockwell International, Russelville, KY** - Technical Affairs Manager for the excavation and disposal of 80,000 tons of non-RCRA hazardous sediments and 21,000 tons of PCB sediments from the dredging and removal of approximately 1.5 miles of stream bank. Coordinated with the owner's on-site Engineer to conduct a pre-excavation and post-excavation sampling to determine the depth and lateral extent of dredging/excavation activities. Supervised the operation and permit compliance of a continuous discharge water treatment plant at the site.

- **Carter Industrial Site, Detroit, MI** - Technical Affairs Manager for the excavation and off-site disposal of 35,000 tons of PCB contaminated soils and debris, 20,000 tons of non RCRA hazardous solids and approximately 200 drums and cylinders. Duties included development and implementation of a pre-excavation and post-excavation soil sampling plan as well as a drum characterization and sampling plan. Also coordinated the on-site treatment, delisting, and verification sampling of 5,000 tons of lead contaminated soil. Arranged for and coordinated the off-site disposal (landfill) of all site wastes at the appropriately permitted landfills.

Taylor Instruments Site, Rochester, NY - Technical Affairs Manager for the excavation and off-site disposal of 43,000 tons of non hazardous, mercury and solvent contaminated soils and debris from the demolition and removal of a former mercury instrument manufacturing facility. Coordinated the sampling and off-site disposal of all site wastes to the appropriate (landfill, stabilization, chemical treatment and mercury recycling) facility. Large quantities of free mercury and soils with mercury levels exceeding the High Mercury Land Ban Subcategory necessitated special handling and disposal requirements.

- **Commercial Oil Site, Oregon, OH** - Technical Affairs Manager for the characterization, consolidation and off-site disposal of the contents of 30 bulk oil storage at this former waste oil recovery facility. Coordinated the sampling and analysis of the various phases and contents of all tanks at the site. Waste materials were consolidated based on their characteristics and compatibilities for off-site disposal (fuels blending/recovery, chemical treatment, and incineration).

- **Barker Chemical Site (NYS Superfund), Sodus, NY** - Technical Affairs Manager for the excavation and offsite disposal of pesticide-contaminated soils, sediments, and debris. Duties included developing and coordinating pre-excavation (to establish excavation limits) and post-excavation (to verify completion) sampling plans. Arranged for and coordinated the transportation and disposal (through incineration, chemical oxidation treatment, and macroencapsulation) of 4,000 tons of contaminated soil and building demolition debris.

- **Summit National Superfund Site (USEPA Region V), Deerfield, OH** - Technical Affairs Manager for the sampling, characterization, analysis, and disposal of approximately 500 drums of material and the contents of five underground storage tanks.

- **Metaltec/Aerosystems Site (USEPA Region II), Franklin, NJ** - Technical Affairs Manager for the onsite thermal treatment of approximately 11,000 tons of hazardous soils. Coordinated the post-treatment sampling of ash to verify that site-specific treatment criteria were met and that waste was correctly classified. Arranged for and coordinated the transportation and offsite disposal of all treated soils.

- **Marathon Battery Site, Cold Spring, NY** - Technical Manager responsible for all on-site regulatory compliance matters. Duties include on-site supervision of pre- and post-excavation and treatment sampling programs; quality control of off-site analytical laboratories; interfacing with off-site disposal facilities; and liaison with the client regarding waste classification issues. Coordinated the offsite transportation and disposal via rail of 150,000 tons of delisted soils and sediments.

- **Madison Wire Site, West Seneca, NY** - Technical Manager responsible for all on-site regulatory compliance matters. Duties included supervision of an extensive in-situ sampling program to characterize the waste based upon "as-excavated" chemical characteristics; conducted post-excavation sampling program including expedited turnaround by off-site laboratories (with appropriate levels of QC) to facilitate ongoing excavation activities.

- **Blosenski Landfill Site, Coatesville, PA** - Technical Manager responsible for all on-site regulatory compliance matters. Duties included management of all on-site sampling and analysis programs, including development of a sample compositing and characterization program using an on-site laboratory. Also facilitated early completion of the project by utilizing several disposal methodologies in parallel (incineration, chemical stabilization, and RCRA landfill) to facilitate the removal of 1,200 tons of contaminated soils and 1,000 buried drums in a 14 day timeframe.

- **Lacey Road Airstrip Site, Forked River, NJ** - Technical Manager responsible for all on-site regulatory compliance matters. Duties included development and implementation of a rigorous in-situ sampling and analysis program which allowed the segregation of wastes based upon halogenated organic (HOC) content. Coordinated the use of several off-site disposal outlets (incineration and landfill) to ensure proper disposition of the wastes prior to the implementation of the third-third land ban regulations.

Stout Environmental, Inc., Bordentown, NJ (1988 to 1991)

Technical/Waste Approvals Coordinator, responsible for all technical aspects of HTRW projects, as well as technical support for approval of wastes into the Stout TSD facilities. Duties included:

- Development and management of proper waste sampling protocol, interpretation of chemical analyses, classification of waste materials, compliance with applicable laws and regulations, and securing approvals for shipment of waste to TSD facilities. Coordinated project estimating and prepared technical work plans for various types of HTRW activities.

Comparable Project Experience:

- **Borne Chemical Site, Elizabeth, NJ** - Technical Manager responsible for waste classification and disposal. Duties included supervision of all site sampling, analysis, characterization programs, including determination of appropriate consolidation and off-site disposal methods and facilities. Also established and supervised the operation of an on-site laboratory, as well as contracting for disposal of all wastes via aqueous treatment, landfill, incineration and fuels blending, as appropriate.

APPENDIX D
TRANSPORTER SPILL CONTINGENCY PLANS

PENDING

APPENDIX E
EXAMPLE SHIPPING PAPERWORK

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
Site EPA ID#	X	(123) 456-7890	Load #

GENERATOR

5. Generator's Name and Mailing Address

Site Address

Generator's Phone: (123) 456-7890 Contact

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: XYZ Trucking — U.S. EPA ID Number: T.B.D.

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address: ABC Disposal — U.S. EPA ID Number: T.B.D.

Facility's Phone: (123) 456-7890

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-DOT Regulated Material	X	X	X	X	
2.						
3.						
4.						

Special Handling Instructions and Additional Information

Approval #

Delivery Time:

14. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: XPrint Name — Signature: Sign Name — Month Day Year: Date

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: XPrint Name — Signature: Sign Name — Month Day Year: Date

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name — Signature — Month Day Year

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
Site EPA ID#	X	(123) 456-7890	001757086 JJK

GENERATOR

5. Generator's Name and Mailing Address
Site Mailing Address

Generator's Phone: (123) 456-7890 Contact Name

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: XYZ Trucking — U.S. EPA ID Number: T.B.D.

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address: ABC Disposal — U.S. EPA ID Number: T.B.D.

Facility's Phone: (123) 456-7890

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. DOT Shipping Name Hazard Class, DOT ID#, Packing Group	X	X	X	X	X		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
Approval # ERG#:
Delivery Time:

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Print Name — Signature: Sign Name — Month Day Year: Date

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Print Name — Signature: Sign Name — Month Day Year: Date

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

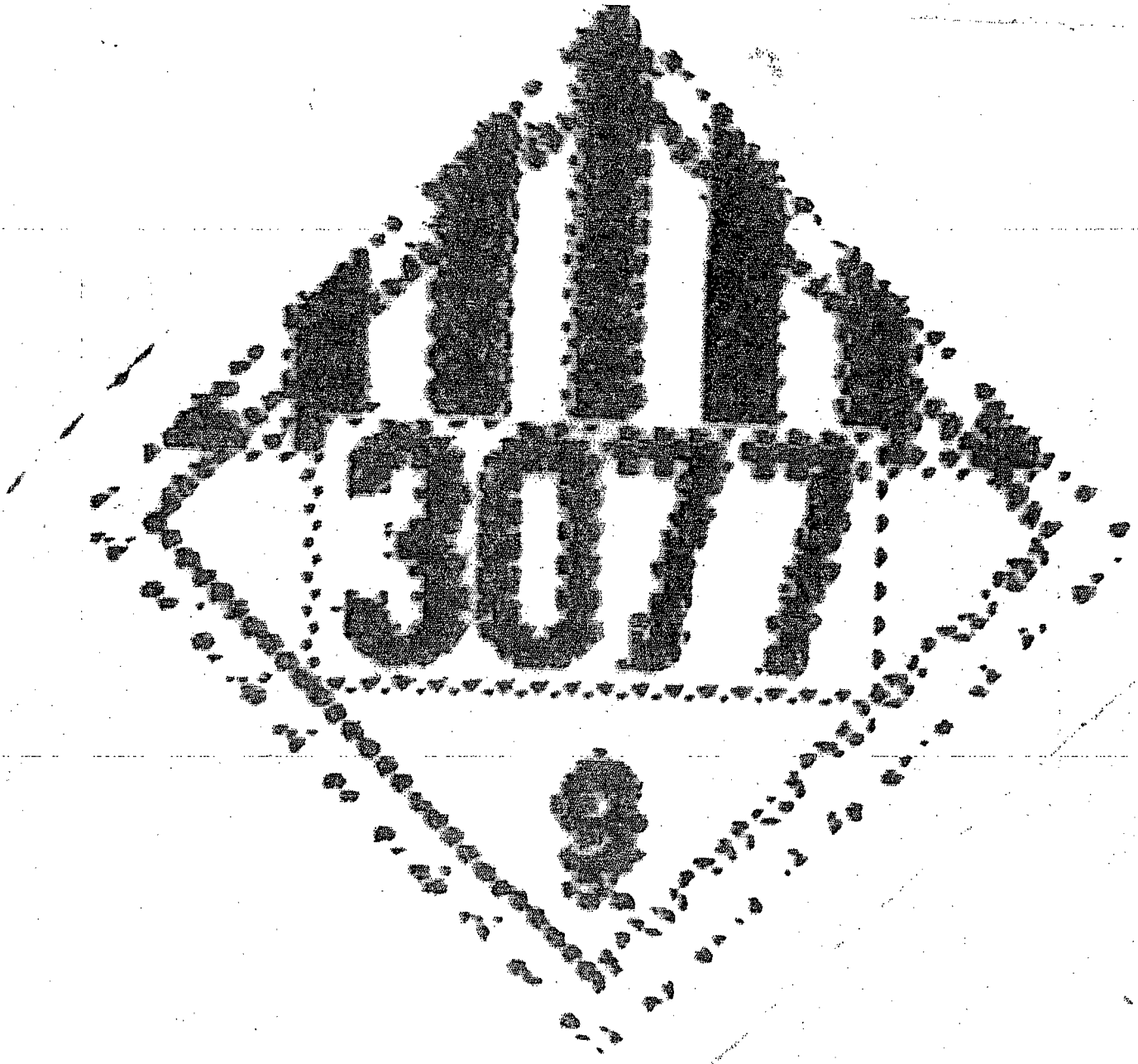
Printed/Typed Name — Signature — Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

APPENDIX F
EXAMPLE PLACARDS


1115
2315


307

APPENDIX G
TRANSPORTATION ROUTES

Paisley, Ken

Subject: FW: Cornell Dubilier Superfund Site - South Plainfield, NJ C&D debris T&D

Truck Route from Pioneer Crossing Landfill to Cornell Dubilier Superfund Site

South Plainfield, NJ

Take the Pennsylvania Turnpike East to

New Jersey Turnpike North to

Exit 10

Take 287 North

Get off Exit 4

At the end of the ramp turn right on Stelton Road

Take Stelton Road to S. Clinton Road (RT 603)

Turn left on S. Clinton Road follow down to New Market Ave.

Turn right on New Market Avenue

Follow to dead end.

Go across Hamilton Street and straight into job site.

11/16/2006

MAPQUEST

Start: **333 Hamilton Blvd**
South Plainfield, NJ 07080-3339, US

End: **Model City, NY US**

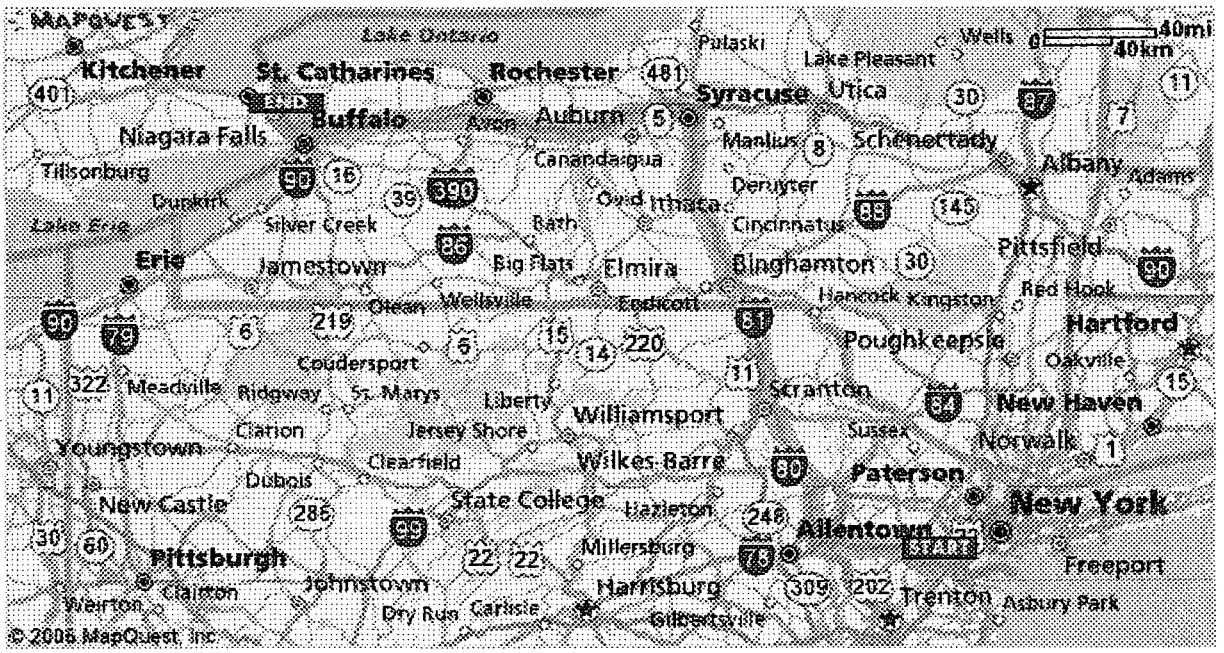
Notes:
Directions to CWM/Waste Management

Model City, NY

Directions	Distance
Total Est. Time: 6 hours, 50 minutes **Total Est. Distance:** 417.74 miles	
1: Start out going SOUTH on HAMILTON BLVD toward LAKEVIEW AVE / CR-603.	1.3 miles
2: Turn RIGHT onto HAMILTON BLVD / CR-603.	1.1 miles
3: Turn LEFT onto STELTON RD / CR-529.	<0.1 miles
4: Merge onto I-287 N via the ramp on the LEFT.	12.1 miles
5: Keep LEFT to take I-287 N toward I-78 W.	2.7 miles
6: Merge onto I-78 W via EXIT 21B on the LEFT toward EASTON PA (Portions toll) (Crossing into PENNSYLVANIA).	36.9 miles
7: Merge onto PA-33 N via EXIT 71 toward US-22 / STROUDSBURG.	28.2 miles
8: Merge onto I-80 W via the exit on the LEFT toward HAZLETON.	9.0 miles
9: Merge onto I-380 N via EXIT 293 toward SCRANTON.	27.7 miles
10: Merge onto I-81 N toward BINGHAMTON (Crossing into NEW YORK).	130.7 miles
11: Merge onto I-690 W toward FAIRGROUNDS / BALDWINSVILLE.	8.8 miles
12: Merge onto I-90 W / NEW YORK STATE THRUWAY W via EXIT 1 toward BUFFALO (Portions toll).	131.0 miles
13: Merge onto I-290 W / YOUNGMANN EXPY via EXIT 50 toward NIAGARA FALLS.	9.8 miles
14: Merge onto I-190 N toward NIAGARA FALLS (Portions toll).	14.2 miles

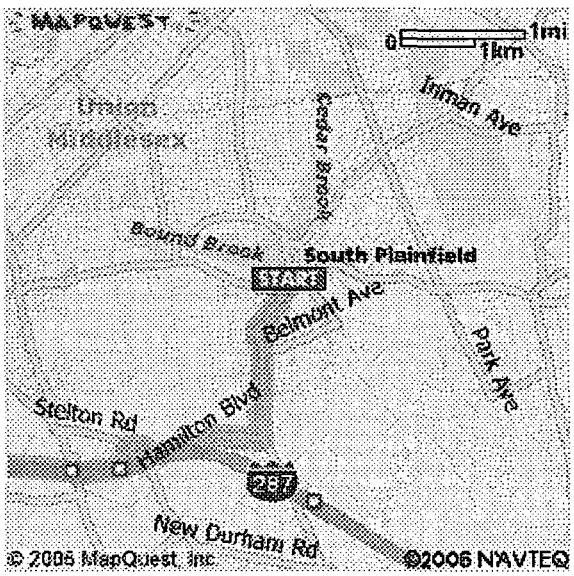
	**15:** Take the RT-265 exit- EXIT 25A- toward LEWISTON.	0.1 miles
	**16:** Turn LEFT onto MILITARY RD / NY-265.	0.1 miles
	**17:** Turn RIGHT onto UPPER MOUNTAIN RD / CR-11.	2.5 miles
	**18:** Turn SLIGHT LEFT onto INDIAN HILL RD / CR-11.	0.4 miles
	**19:** Keep LEFT at the fork to continue on INDIAN HILL RD / CR-11.	0.1 miles
	**20:** INDIAN HILL RD / CR-11 becomes MODEL CITY RD.	0.4 miles
	**21:** End at **Model City, NY US**	

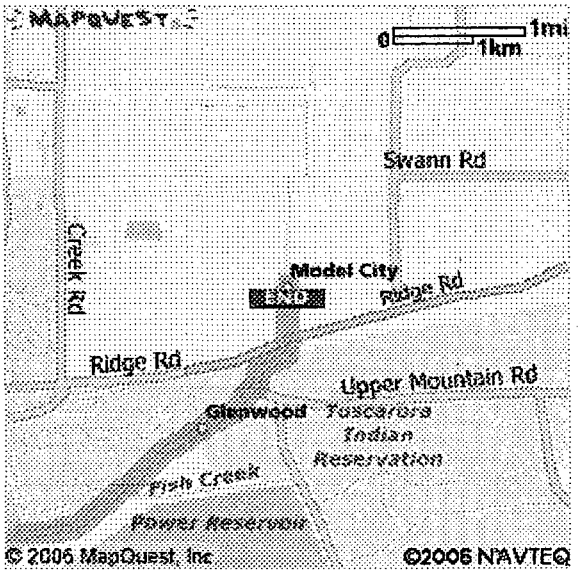
Total Est. Time: 6 hours, 50 minutes **Total Est. Distance:** 417.74 miles



Start:
333 Hamilton Blvd
South Plainfield, NJ 07080-3339, US

End:
Model City, NY US





MAPQUEST

Start: **333 Hamilton Blvd**
South Plainfield, NJ 07080-3339, US

End: **Belleville, MI US**

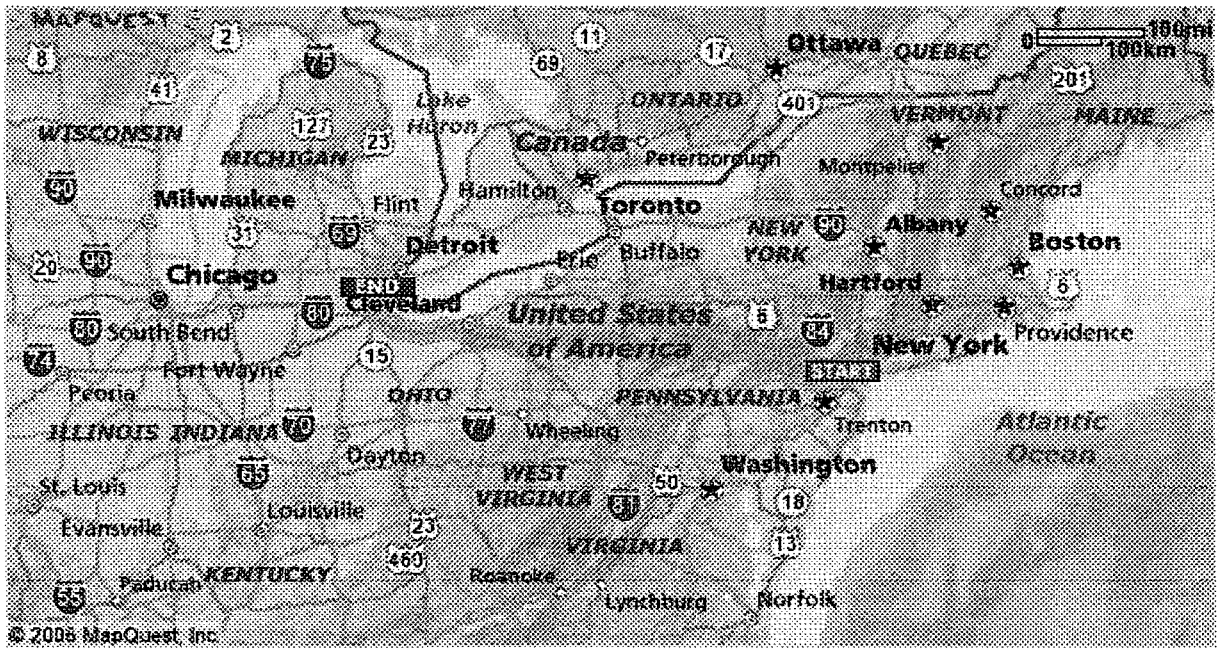
Notes:
Directions to EQ Compnay

Belleville, Mi

Directions	Distance
Total Est. Time: 9 hours, 42 minutes **Total Est. Distance:** 610.06 miles	
1: Start out going SOUTH on HAMILTON BLVD toward LAKEVIEW AVE / CR-603.	1.3 miles
2: Turn RIGHT onto HAMILTON BLVD / CR-603.	1.1 miles
3: Turn LEFT onto STELTON RD / CR-529.	<0.1 miles
4: Merge onto I-287 N via the ramp on the LEFT.	12.1 miles
5: Keep LEFT to take I-287 N toward I-78 W.	2.7 miles
6: Merge onto I-78 W via EXIT 21B on the LEFT toward EASTON PA (Portions toll) (Crossing into PENNSYLVANIA).	36.9 miles
7: Merge onto PA-33 N via EXIT 71 toward US-22 / STROUDSBURG.	28.2 miles
8: Merge onto I-80 W via the exit on the LEFT toward HAZLETON (Portions toll) (Crossing into OHIO).	467.0 miles
9: Merge onto I-280 N via EXIT 71 toward TOLEDO / DETROIT.	13.0 miles
10: Take the exit on the LEFT.	0.1 miles
11: Merge onto I-75 N toward DETROIT (Crossing into MICHIGAN).	23.3 miles
12: Merge onto I-275 N via EXIT 20 toward FLINT.	17.4 miles
13: Merge onto I-94 W via EXIT 17.	4.4 miles
14: Take the BELLEVILLE RD exit- EXIT 190- toward BELLEVILLE.	0.3 miles

	15: Turn LEFT onto BELLEVILLE RD.	1.0 miles
	16: BELLEVILLE RD becomes MAIN ST.	0.5 miles
END	**17:** End at **Belleville, MI US**	

Total Est. Time: 9 hours, 42 minutes **Total Est. Distance:** 610.06 miles



Start:
333 Hamilton Blvd
South Plainfield, NJ 07080-3339, US

End:
Belleville, MI US